

# Notice of Allowability

Application No.

10/626,100

Examiner

David D. Le

Applicant(s)

FITZGERALD ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 23 September 2004.
2. ☒ The allowed claim(s) is/are 1-16 and 28-46.
3. ☒ The drawings filed on 24 July 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### **DETAILED ACTION**

1. This is the first Office action on the merits of Application No. 10/626,100, filed on 24 July 2003. Claims 1-46 are pending.

### **Documents**

2. The following documents have been received and filed as part of the patent application:
  - Information Disclosure Statement, received on 09/26/03

### ***Election/Restrictions***

3. This application is in condition for allowance except for the presence of claims 17-27 to invention non-elected without traverse. Accordingly, claims 17-27 have been cancelled.

### ***Allowable Subject Matter***

4. Claims 1-16 and 28-46 are allowed.
5. The following is an examiner's statement of reasons for allowance:

#### **Claim 1:**

The prior art of record fails to show or render obvious a power transmission device comprising a rotary input member, a rotary output member, and a torque transfer mechanism having a bi-directional overrunning clutch; specifically, wherein the bi-directional overrunning clutch includes first and second rings, and a plurality of rollers

disposed in aligned cam tracks formed in facing surfaces of the first and second rings; and, wherein the second ring is adapted to circumferentially index relative to the first ring to cause the rollers to ride up the cam tracks, which causes the second ring to frictionally engage one of the rotary input member and the rotary output member, as recited in the claim.

Claim 7:

The prior art of record fails to show or render obvious a power transmission device comprising a rotary input member, a rotary output member, a torque transfer mechanism having a bi-directional overrunning clutch, and a mode actuator; specifically, wherein the bi-directional overrunning clutch includes first, second and third rings, and a plurality of rollers disposed in aligned cam tracks formed in facing surfaces of the second and third rings; and, wherein the third ring is adapted to circumferentially index relative to the second ring to cause the rollers to ride up the cam tracks, which causes the third ring to frictionally engage the rotary output member, as recited in the claim.

Claim 13:

The prior art of record fails to show or render obvious a power transmission device comprising a rotary input member, a rotary output member, and a bi-directional overrunning clutch; specifically, wherein the bi-directional overrunning clutch includes first, second and third rings, and a plurality of rollers disposed in aligned cam tracks formed in facing surfaces of the second and third rings; and, wherein the third ring is

adapted to circumferentially index relative to the second ring to cause the rollers to ride up the cam tracks, which causes the third ring to frictionally engage the first ring, as recited in the claim.

Claim 28:

The prior art of record fails to show or render obvious a transfer case comprising a first shaft, a second shaft, and a transfer assembly, and a mode clutch; specifically, wherein the mode clutch includes first and second rings, and a plurality of rollers disposed between aligned sets of the first and second cam surfaces; and, wherein the second ring is adapted to circumferentially index relative to the first ring to cause the rollers to ride up the cam surfaces, which causes the inner surface of the second ring to frictionally engage the outer surface of the second shaft, as recited in the claim.

Claim 30:

The prior art of record fails to show or render obvious a transfer case comprising a first shaft, a second shaft, and a transfer assembly, and a mode clutch; specifically, wherein the mode clutch includes first and second rings, and a plurality of rollers disposed between aligned sets of the first and second cam surfaces; and, wherein the second ring is adapted to circumferentially index relative to the first ring, to cause the rollers to ride up the cam surfaces, which causes the inner surface of the second ring to frictionally engage the outer surface of the first shaft, as recited in the claim.

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Claim 32:

The prior art of record fails to show or render obvious a transfer case comprising a first shaft, a second shaft, and a transfer assembly, and a mode clutch; specifically, wherein the mode clutch includes first and second rings, and a plurality of rollers disposed between aligned sets of the first and second cam surfaces; and, wherein the first ring is adapted to circumferentially index relative to the second ring, to cause the rollers to ride up the cam surfaces, which causes the outer surface of the first ring to frictionally engage the inner surface of the second sprocket, as recited in the claim.

Claim 34:

The prior art of record fails to show or render obvious a transfer case comprising a first shaft, a second shaft, and a transfer assembly, and a mode clutch; specifically, wherein the mode clutch includes first and second rings, and a plurality of rollers disposed between aligned sets of the first and second cam surfaces; and, wherein the first ring is adapted to circumferentially index relative to the second ring, to cause the rollers to ride up the cam surfaces, which causes the outer surface of the first ring to frictionally engage the inner surface of the first sprocket, as recited in the claim.

Claim 36:

The prior art of record fails to show or render obvious a power transmission device comprising a rotary input member, a rotary output member, and a bi-directional overrunning clutch; specifically, wherein the bi-directional overrunning clutch includes

first, second and third rings, and a plurality of rollers disposed in aligned cam tracks formed in facing surfaces of the second and third rings; and, wherein the third ring is adapted to circumferentially index relative to the second ring to cause the rollers to ride up the cam tracks, which causes the third ring to frictionally engage the rotary output member, as recited in the claim.

Claim 41:

The prior art of record fails to show or render obvious a power transmission device comprising a rotary input member, a rotary output member, and a bi-directional overrunning clutch; specifically, wherein the bi-directional overrunning clutch includes first, second and third rings, and a plurality of rollers disposed in aligned cam tracks formed in facing surfaces of the second and third rings; and, wherein the third ring is adapted to circumferentially index relative to the second ring to cause the rollers to ride up the cam tracks, which causes the third ring to frictionally engage the first ring, as recited in the claim.

Claim 45:

The prior art of record fails to show or render obvious a power transmission device comprising a rotary input member, a rotary output member, and a mode clutch; specifically, wherein the bi-directional overrunning clutch includes first, second and third rings, and a plurality of rollers disposed in aligned cam tracks formed in facing surfaces of the second and third rings; and, wherein the third ring is adapted to circumferentially

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index relative to the second ring to cause the rollers to ride along the cam tracks, which causes the third ring to frictionally engage the output member, as recited in the claim.

Claim 46:

The prior art of record fails to show or render obvious a power transmission device comprising a rotary input member, a rotary output member, and a mode clutch; specifically, wherein the bi-directional overrunning clutch includes first, second and third rings, and a plurality of rollers disposed in aligned cam tracks formed in facing surfaces of the second and third rings; and, wherein the third ring is adapted to circumferentially index relative to the second ring to cause the rollers to ride along the cam tracks, which causes the third ring to frictionally engage the first ring, as recited in the claim.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Le whose telephone number is 703-305-3690. The examiner can normally be reached on Mon-Fri (0700-1530).


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A Marmor can be reached on 703-308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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SAUL RODRIGUEZ  
PRIMARY EXAMINER  
4/12/04  
3681



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